

## ABSTRACT

The present invention provides a thrombin derivative, comprising an A chain and a B chain, the B chain having an amino acid sequence in which one or more kinds of active center amino acids selected from the group consisting of serine at position 205, glycine at position 203, aspartic acid at position 99, and histidine at position 43 in an amino acid sequence of a thrombin B chain are substituted, having the properties: (1) cleaving a thrombin substrate at the ratio of 10% or less when it is reacted with the thrombin substrate in 50 mM Tris-HCl (pH 7.4) containing 0.1 M NaCl at 37°C for 3 hours, and (2) maintaining a structure of exosite I.